

Serial No. 10/509,835
Docket No. 7393/84118
Page 5

REMARKS

Applicants courteously solicit favorable reconsideration and allowance with respect to all claims.

Applicants present claims 1, 2, 5, 6, and 9-16 for further examination. New claims 12 and 13 find basis in the original specification at page 4, lines 1-2 and at page 4, penultimate paragraph. New claim 13 finds basis in the original specification, including original claims 2 and 6. New claims 14 and 15 find basis in the original specification, including original claim 3 as an example.

A. Applicants submit that claims 1-4 and 9-10 define novel and unobvious inventions over the combination of U.S. Patent No. 4,840,797 (Boursier) in view of U.S. Patent No. 4,849,023 (Devos) when taken with newly cited U.S. Patent No. 5,470,591 (Ribadeau-Dumas).

Applicants submit that claims 1-4 and 9-13 would not have been obvious to one of ordinary skill in the art in view of Boursier, even if Boursier were combined with Devos. Applicants additionally submit that Ribadeau-Dumas effectively teaches away from the present invention. Since Ribadeau-Dumas affirmatively teaches away, it is courteously suggested that the obviousness rejection over this trio of references be favorably reconsidered and withdrawn.

1. Boursier does not describe, nor would it have suggested, the claimed inventions.

A broad range as in Boursier does not describe a narrower range, nor would the broad range have suggested the narrower range. The Boursier reference may mention a relative range, but that neither describes Applicant's range, nor suggests such range. As the Federal Circuit explained in the analogous situation in *Atofina*:

Serial No. 10/509,835

Docket No. 7393/84118

Page 6

A temperature range of over 100 degrees is not a small genus and the range of temperatures of JP 51-82206 does not disclose Atofina's temperature range...

and

[m]oreover, the disclosure of a range of 150 to 350 °C does not constitute a specific disclosure of the endpoints of that range, i.e., 150 °C and 350 °C, as Great Lakes asserts. The disclosure is only that of a range, not a specific temperature in that range, and the disclosure of a range is no more a disclosure of the endpoints of the range than it is of each of the intermediate points. Thus, JP 51-82206 does not disclose a specific embodiment of the claimed temperature range.

Atofina v. Great Lakes Chemical, 78 U.S.P.Q.2d 1417, 1423 (Fed. Cir. 2006).

The Boursier reference does not describe, nor would it have taught, the syrup having a dry matter content of from 68-72% as in claim 1. In fact, the Boursier reference apparently would have taught a range of from 55-65 wt% (column 2, line 40), but that would not have suggested Applicants' higher range of 68-72%.

The Boursier reference does not describe, nor would it have taught, the syrup having the dry matter content of from 70-72% as in claim 9.

The Boursier reference does not describe, nor would it have taught, the hard coating having a homogeneous surface as in claim 12.

The Boursier reference would not have taught the person of ordinary skill in the art that a dry matter content of syrup comprises from 0.7-1.5 wt% of DE₄ as in claim 1, claim 2, claim 5, and claim 6.

The Boursier references teaches directly away from the claimed inventions, including those in claims 1, 2, 9, 10 and 11. The Boursier reference specifically admits that "[b]eyond 65% the crystallization is irregular and surface defects appear; below 50%, the chewing-gums are sticky and the dry times considerable." Boursier, column 6, lines

Serial No. 10/509,835
Docket No. 7393/84118
Page 7

19-21. The Boursier reference, therefore, would not have suggested the dry contents in claims 1, 2 or 9, nor would it have suggested "comestibles have a smooth, regular surface" when the dry content is above 65%. The Boursier reference would have taught away from the chewing gum according to claim 1 or, for instance, claim 11 (former claim 4).

2. Applicants specification provides rebuttal to citation and reliance on the Boursier reference.

Applicants' comestibles with a hard coating exhibiting a homogeneous surface are the antithesis of what Boursier discloses, and Applicants' discovery of the problem and their inventive solution for overcoming it would not have been suggested by Boursier alone, nor even if Boursier were combined with Devos, inasmuch as the latter shows no awareness of the problem or a way of solving it.

The present specification includes the evidentiary basis that shows Applicants' inventions would have been unobvious. The evidentiary basis effectively rebuts any *prima facie* case even if, *arguendo*, such a case were allegedly established.

The cited Boursier reference is the U.S. counterpart to EP 0 201 412.

Applicants' specification discloses to those skilled in the art that Boursier's EP 0 201 412 describes:

a confectionary or pharmaceutical product provided with a hard, sugarless coating obtained by hard coating using a maltol syrup having a dry matter content of from 50-75% by weight, the coating being essentially crystalline and comprising at least 90% by weight of maltol (specification, page 1, paragraph 4).

Serial No. 10/509,835
Docket No. 7393/84118
Page 8

Applicants' specification further discloses for those skilled in the art that according to Boursier:

EP 0 201 412 describes a maltol syrup which is consisting of 97.1% by weight of maltol, 1.1% by weight of sorbitol and 1.8% by weight of maltotriitol. **Said syrup is devoid of any DP₄₊ fraction, and it is clearly demonstrated that it is not possible to obtain a regular surface when applying the maltol syrup at a dry substance content higher than 65%. In cases where higher drier substance is used, the crystallization is irregular and defects on the surface appear.**

Specification, page 3, penultimate paragraph, emphasis added; see also Boursier at column 8, lines 19-21.

Indeed, Applicants' specification, which was verified with the oath and declaration, includes the evidentiary summation:

Surprisingly, the current invention demonstrates that maltitol syrups containing from 0.7-1.5% DP₄₊ on dry matter content, and from 95-97% maltitol on dry matter content, are suitable to use syrups at a dry substance higher than 65%, i.e. at dry substance of 68-72% and yet regular hard coatings are obtained (see FIG. 1). Preferably, maltitol syrups having a dry matter content from 70-72%, result in a **hard coating with a homogeneous surface.**

Specification, as filed, page 3 bridging to page 4 (emphasis added).¹

¹ "It should not be necessary for this court to point out that a patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the "subject matter as a whole" which should always be considered in determining the obviousness of an invention under 35 U.S.C. 103. In re Antonson, 47 CCPA 740, 272 F.2d 948, 124 USPQ 132 ; In re Linnert, 50 CCPA 753, 309 F.2d 498, 135 USPQ 307 . The court must be ever alert not to read obviousness into an invention on the basis of the applicant's own statements; that is, we must view the prior art without reading into that art appellant's teachings. ..." In re Spennoble, 160 U.S.P.Q. 237, 243 (CCPA 1969).

Serial No. 10/509,835
Docket No. 7393/84118
Page 9

Indeed, the present specification additionally teaches Applicants' invention concerns "[e]specially a sugar-free hard-coated comestible wherein the core is regularly formed and remains intact during processing and during any post-treatment (such as packaging)." Specification, as filed, page 5, paragraph starting at line 5.

The evidentiary showing in the specification consistent with the above-stated results is amply illustrated in FIG. 1. FIG. 1 is a photograph with magnification of 6 x 10. The photograph shows that the hard coating prepared with the liquid maltol syrup of 96% maltol and 0.7-1.5% by weight of DP₄₊ based on dry matter yields a smooth regular surface.

3. The secondary Devos reference would not have suggested changing the approach dictated according to the Boursier reference.

Nonetheless, despite the Boursier disclosure of surface defects and irregularities at dry contents greater than 65%, the Office Action asserts a different composition according to Devos, with alleged dry contents greater than 65%, would have been substituted into Boursier. Devos is inconsistent with Boursier, and there would have been no expectation of success as to Applicant's claimed inventions.

Therefore, even if, for the sake of argument only, one were to have engaged in hindsight modification of the Boursier reference according to the Office Action, the expected result would, at best, be an irregular crystallization and defects on the surface of the sugar-coated comestible that would be a disadvantageous, undesirable, and unacceptable result. Why? Boursier made it clear that "[b]eyond 65%,

Serial No. 10/509,835
Docket No. 7393/84118
Page 10

the crystallization is irregular and surface defects appear..." Column 6, lines 19-21.²

Applicants have achieved success, whereas the approach postulated according to the Office Action results in failure for the reasons set forth in the Boursier reference.

Thus, the references would not have been combined, and even if they were, there would have been no reason to substitute Devos's different composition for the composition in Boursier, nor would there have been a reasonable expectation of success.

4. Applicants courteously submit that Ribadeau-Dumas does not provide motivation, suggestion, teaching or reason to modify the inadequate combination of Boursier and Devos to reach Applicants' inventions.

The Ribadeau-Dumas reference affirmatively teaches there must be a **high concentration of DP_n** components. Indeed, the amount taught is more than double the amount recited in Applicants' claims. This teaching away undercuts the retrospectively guided reconstruction of the claimed inventions from Boursier and Devos.

Ribadeau-Dumas exemplify the "high concentration" as being "more than 3% expressed on a dry matter basis of molecules having a molecular weight greater than 1,300 daltons." Ribadeau-Dumas, column 4, lines 61-63. See also, column 5, lines 1-3 ("3 to 19% of molecules having a molecular weight greater than 1,300 daltons"); column 6, lines 60-65 ("containing more than 3% of molecules having a molecular weight greater than 1,300 daltons"); column 7, lines 44-51 ("more than 3%,

² "Notwithstanding our analysis above, concerning appellant's recognition of the source of the problem and solution thereof, we believe that the multi-reference rejection affirmed below is improper for reasons existing within the disclosures of the references themselves, namely, that the references themselves teach away from the combination." In re Spinnoble, 160 USPQ at 244 (emphasis added).

Serial No. 10/509,835
Docket No. 7393/84118
Page 11

preferably 5 to 19%, more preferably 7 to 19%" to ; column 14, line 18 (20.3%).

As to the "high concentration," Ribadeau-Dumas teaches that they "found a very effective means for achieving the control of propagation of crystallization of maltitol and [have] developed a process for controlling propagation of crystallization of maltitol contained in a crystallizable sweetening syrup or a confectionary proeduct such as in a boiled sugar or a semicrystallized item." Ribadeau-Dumas, column 5, lines 39-45.³ Ribadeau-Dumas then expressly state that their anticrystallizing agents "are found to be **solely good inhibitors** of crystallization when they are present in **high concentration**, or alternatively mere retarders of crystallization at low concentration insofar as they retard, in this case, solely over time, the time of appearance of maltitol crystals, such that the problem described above cannot be solved by the use of such molecules." Ribadeau-Dumas, column 5, lines 53-58.

Ribadeau-Dumas might be said, therefore, to direct the presence of DP₄ components at levels at least 200% higher than called for in Applicants' claims. Ribadeau-Dumas apparently teach unpredictable graining (column 2, line 57 et seq. and column 5, lines 58-59), or extreme softness (column 3, lines 3-10 and column 5, lines 58-59), remain if the DP₄ components are not present in the "high concentrations" (column 5, line 55).

Applicants' claims 2, 6 and 14 recite less than 1.5% by weight DP₃ or 0 to 1.5% by weight DP₃, and this range would not have been suggested by the Ribadeau-Dumas reference. While the reference refers

³ A boiled sugar typically refers to water and a high sugar concentration mixture, boiled to the point of supersaturation with sugar), which is superstaturate is cooled, and a plastic glassy mass containing little water (less than about 2% water) is formed. These high-boiled sugars are unstable, and can readily harden to an irregular glassy state unless stabilized.

Serial No. 10/509,835
Docket No. 7393/84118
Page 12

to DP₄₃, such as in column 7, Ribadeau-Dumas teaches preferences that lead away from the range recited in claims 2, 6 and 14. Ribadeau-Dumas discloses, for instance, amounts of DP₄₃ are "preferably between 1 and 12%, and still more preferably between 2 and 9%" (column 7, lines 21-22), and it discloses as to molecules having a molecular weight close to maltotritol, an amount "preferably between 0.1 and 14%, more preferably between 4 and 9%" (column 7, lines 27-28). With its preference for higher amounts of DP₄₃, Ribadeau-Dumas again shows it is distinct from the present claimed inventions. Besides, the ranges do not describe Applicants' range (see, e.g., *Atofina, supra*), nor would they have suggested such claimed range.

Applicants, therefore, earnestly but courteously solicit the Examiner's favorable reconsideration and withdrawal the characterization of the Ribadeau-Dumas reference in the Office Action, pages 3-4 and paragraphs 7, 8 and 9, and thence withdrawal the obviousness rejection based on the combination of Boursier, Devos and Ribadeau-Dumas.

5. Applicants courteously submit the Examiner should provide an Examiner's affidavit if the obviousness rejection over Boursier, Devos and Ribadeau-Dumas is not withdrawn.

An Examiner's Declaration is respectfully requested that supplies the facts not apparent from the references cited, if the rejection is not favorably reconsidered and withdrawn. If the rejection is to be maintained, a factual predicate for the combination of references must be supplied, and a factual predicate must be presented for modifying the references per the Office Action.

However, Applicants respectfully submit the rejection founders on its own shoals: (a) the first two references are divergent, and one teaches away from the very thesis advocated in the Office Action; and (b) the third reference teaches away from the claimed inventions such

Serial No. 10/509,835
Docket No. 7393/84118
Page 13

that it suggests the first two references would not have been combined as hypothesized in the Office Action.

B. Applicants submit claims 5 and 6 define unobvious inventions over the combination of Corriveau and Devos.

Applicants courteously but earnestly submit claims 5 and 6 define unobvious inventions over the Corriveau reference taken in view of the Devos reference. Dependent claims 14 and 15 refer to chocolate and nuts, which appear to be inconsistent with Corriveau (see column 7, lines 15-20).

Applicants submit that there would have been no reasonable expectation of success even if a person of ordinary skill in the art had undertaken the statutorily proscribed hindsight - retrospective analysis - detailed in the Office Action. Even if the hindsight guided retrospective analysis were appropriate, which it is not (as seen from the statutory command in 35 U.S.C. §103(a)), the specification herein details the evidentiary basis that refutes the result postulated in the Office Action, i.e., shows at the very least that the approach would not have been expected to be successful.

Accordingly, reconsideration and withdrawal of this rejection is courteously but earnestly solicited. If there are any questions, the Examiner is invited to contact the undersigned if there are any questions.

To the extent necessary during prosecution, Applicants hereby request any required extension of time not otherwise requested and hereby authorize the Commissioner to charge any unintentionally omitted fee, especially those required to maintain pendency of the present application, including application processing, extension,

Serial No. 10/509,835
Docket No. 7393/84118
Page 14

extra claims, statutory disclaimer, issue, and publication fees, to
Deposit Account No. 06-1135.

Respectfully submitted,
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